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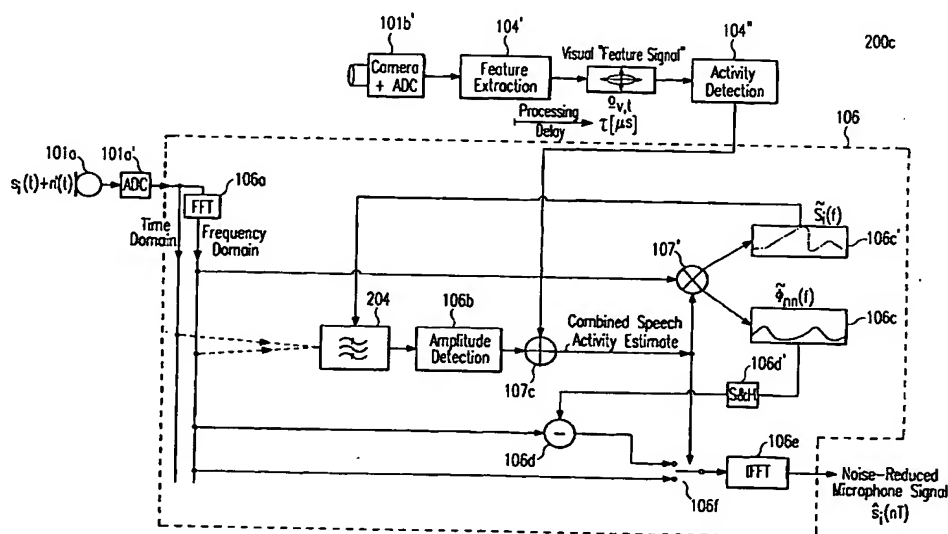
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- (54) Title: NOISE REDUCTION AND AUDIO-VISUAL SPEECH ACTIVITY DETECTION**



- (57) Abstract:** The present invention generally relates to the field of noise reduction systems which are equipped with an audio-visual user interface, in particular to an audio-visual speech activity recognition system (200b/c) of a video-enabled telecommunication device which runs a real-time lip tracking application that can advantageously be used for a near-speaker detection algorithm in an environment where a speaker's voice is interfered by a statistically distributed background noise ($n(t)$) including both environmental noise ($n(t)$) and surrounding persons' voices.



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